

1979 TRANSACTIONS TABLE OF CONTENTS

SYMPOSIUM A - CAPITAL COST CONTROL

| | | | |
|-----|---|--------------------------------------|-----|
| A-1 | Cost Control - Back To Basics | Daniel P. Elliott, PE, CCE..... | A-1 |
| A-2 | Profit Control Through Performance Measurement System | Parmanand Kumar..... | A-2 |
| A-3 | Project Control - By Whom? Of What? | James A. Bent, CCE..... | A-3 |
| A-4 | Cost Control on Multi-Contract Projects | Dick Sharad, CCE..... W. W. Roney | A-4 |
| A-5 | Key Cost Control for Capital Projects | John W. Hackney, CCE..... | A-5 |
| A-6 | Value Engineering at the Design Stage | Kenneth F. Marr, Sr., CCE..... | A-6 |

SYMPOSIUM B - CAPITAL COST ESTIMATING

| | | | |
|-----|---|--|-----|
| B-1 | Construction Bidding Cost of KSC Space Shuttle Facilities | Joseph Andrew Brown, CCE..... | B-1 |
| B-2 | Process Plant Cost Modelling During Rapid Technology Development and Implementation | Dale R. Burger..... Robert G. Chamberlain | B-2 |
| B-3 | Factors Effecting Cost Optimization in Middle East Works | P.A. Drakatos..... A. Inglessis N. Coumpas | B-3 |
| B-4 | Benefits of Probabilistic Cost Estimating For Nuclear Power Plant Projects | William C. Finch..... Franklin D. Postula | B-4 |
| B-5 | Forecasting Employing Multi-Variable Analysis | John R. Hays..... | B-5 |
| B-6 | Some Cost Factors For Processing Facilities | Arthur Kowalchuk..... | B-6 |
| B-7 | The Tritium System Test Assembly Control System Cost Estimate | Roger A. Stutz, CCE..... | B-7 |
| B-8 | Practical Methods for Forecasting Material Escalations | Dr. Yue-Chau Wong..... | B-8 |
| B-9 | Bidding in Times of Escalating Inflation | Dr. Zohar Herbsman..... | B-9 |
| B-A | Pre-Estimating Survey - The International Aspect | Anghel Patrascu, CCE..... | B-A |

SYMPOSIUM C - COMPUTER APPLICATIONS

| | | | |
|-----|--|---|-----|
| C-1 | Computerized Cash Flow Forecasting and Optimization Procedure for Multiple Labor Contracts - Owner's Viewpoint | Peter Cipollone..... William H. Conroy T. Kevin Swift | C-1 |
| C-2 | Computer Simulation of Power Plant Cost | Hugh A. Kryski..... William R. Crean, CCE | C-2 |
| C-3 | Probabilistic Cost Estimate Tree Analysis Computer Program | Kazumi Kageyama..... | C-3 |

| | | | |
|-----|--|--------------------------------|-----|
| C-4 | Programmable Calculator - A Time Saving Tool for Cost Engineer | Yatendra M. Shah, PE..... | C-4 |
| C-5 | Compatible Units - A Multiproject System Synthesizing Cost Estimating, Engineering, Productivity, and Accounting | Joseph R. Zelechowski, PE..... | C-5 |
| C-6 | Effective Computer Program Use and Development | Horst P. Richter..... | C-6 |

SYMPOSIUM D - CONSTRUCTION COST MANAGEMENT

| | | | |
|-----|--|--|-----|
| D-1 | An Economic Evaluation of a Piping Bid Proposal | Donald E. Brant, CCE..... N. F. True, CCE R. P. Rasha, CCE | D-1 |
| D-2 | Project Control and the Contract | P. E. Ullman..... | D-2 |
| D-3 | A Piece of Pie - The Bonding and Financing Problems of Minority Contractors | Kweku K. Bentil..... | D-3 |
| D-4 | Accounting for Funds Used During Construction | G. G. Fennimore, CCE..... | D-4 |
| D-5 | Management Systems - Recharge Rate - Engineering Work Load - Construction Schedule - Expediting Report | William G. Clark, CCE..... | D-5 |
| D-6 | The Stone & Webster Engineering Management System (EMS) | Remo J. Silvestrini..... | D-6 |
| D-7 | International Construction Cost Management Thru Automation | William R. Orr, CCE..... | D-7 |
| D-8 | Cost/Performance Measurement A New Concept For Contractors | Melvin F. Rogers..... | D-8 |
| D-9 | Electrical Management System | M. Grinberg..... S. N. Mukho | D-9 |
| D-A | Use the Code to Cut Pressure Vessel Costs | Gustav Enyedy, Jr., CCE..... | D-A |

SYMPOSIUM E - COST INDEX

| | | | |
|-----|--|---|-----|
| E-1 | Cost Indices of Italian Construction | Riccardo Gallo..... | E-1 |
| E-2 | Indexation - A Theoretical Review and An Empirical Perspective | Walter B. Blackwell..... | E-2 |
| E-3 | Research About the Hourly Cost of Earth-Work Trucks | Emmanuel Manatakis..... P. A. Drakatos | E-3 |

SYMPOSIUM F - MANAGEMENT SCIENCE

| | | | |
|-----|---|------------------------|-----|
| F-1 | Life-Cycle Costing | Louis C. Amadio..... | F-1 |
| F-2 | Our Computerized Approach to Cost Engineering | Robert M. Smith..... | F-2 |
| F-3 | An Introduction To Parametric Estimating | Tom E. Krieg, CCE..... | F-3 |

| | | | |
|-----|---|---|-----|
| F-4 | Management Science Applications in Cost Engineering | Dr. Aaron Rose, CCE..... | F-4 |
| F-5 | Research Project Ranking | Henry C. Thorne, CCE..... Julian A. Piekarski, CCE | F-5 |

SYMPOSIUM G - OPERATING/MANUFACTURING COSTS

| | | | |
|-----|---|--|-----|
| G-1 | Cost Control of Solid Waste Plants | Sergio E. Martinez, CCE..... Ward McCarty | G-1 |
| G-2 | Effectiveness and Efficiency Measures For Waste Water Treating and Sludge Processing Plants | Thomas L. Chambers..... Martin J. Manning | G-2 |
| G-3 | Process Control Management | Basile A. Denisoff..... | G-3 |

SYMPOSIUM H - PLANNING AND SCHEDULING

| | | | |
|-----|--|---------------------------------------|-----|
| H-1 | The Benefits of a Fixed Scheduling System | Cecil J. Bendy..... Thomas E. Danz | H-1 |
| H-2 | Minimizing Cost of Delay Related Construction Claims | D. A. Zink, CCE..... | H-2 |
| H-3 | Integration of Cost and Time with the Work Breakdown Structure (WBS) | Jean-Claude Huot..... | H-3 |
| H-4 | The Integration of Job Costing and Project Scheduling | Stephen C. Wexler..... | H-4 |

SYMPOSIUM I - PRODUCTIVITY

| | | | |
|-----|--|-------------------------------|-----|
| I-1 | Productivity - An Updated Concept of Management | H. Murray Hohns, PE..... | I-1 |
| I-2 | Production Capacity - Determination and Analysis | S. L. G. Jain..... | I-2 |
| I-3 | Improving Capital Productivity | Jerry L. Hamlin, PE, CCE..... | I-3 |
| I-4 | The Measurement of Construction Labour Productivity Changes in Bell Canada | Christopher Beckman..... | I-4 |
| I-5 | Unit Pricing As Index of Productivity | Jorge A. Rebata, PE..... | I-5 |

SYMPOSIUM J - PROFESSIONAL AFFAIRS

| | | | |
|-----|---|------------------------------|-----|
| J-1 | The Cost Engineer - Super Clerk or Professional? | Fred S. Griggs, Jr..... | J-1 |
| J-2 | Training the Next Generation of Cost Engineers | Paul F. Bosakowski, CCE..... | J-2 |
| J-3 | How Value Engineering is Relevant to Cost Engineering | Owen E. Rye, CCE..... | J-3 |
| J-4 | Cost Engineer's Perception of Project Management | Ramesh C. Shrivastav..... | J-4 |

| | | | |
|-----|---|-------------------------|-----|
| J-5 | Final Cost Reports? | Fred S. Griggs, Jr..... | J-5 |
| J-6 | The Minority Contractor and His Effect On The Construction Costs of Federally-Funded Projects | Kweku K. Bentil..... | J-6 |

SYMPOSIUM K - UTILITIES ECONOMICS

| | | | |
|-----|---|--|-----|
| K-1 | The National Energy Act and Its Effect On The Present and Future Energy Needs - Panel Discussion | Sidney Katell, PE, CCE..... K. K. Humphreys, PE, CCE Luella G. White | K-1 |
| K-2 | Energy - Social and Political Aspects | F.S. Patton..... | K-2 |
| K-3 | Projected Cash Flow Life Cycle Analysis For Power Industry | Dr. Yue-Chau Wong..... | K-3 |
| K-4 | The First Decade: TVA's First Ten years Of Nuclear Plant Design and Construction Experience | William F. Willis..... | K-4 |
| K-5 | A Rational Method of Costing, Pricing, And Determination of Production Policies in a Multi-Product Case | Dr. Jacob R. Joseph..... | K-5 |

SYMPOSIUM W-6 - METRICATION

| | | | |
|-----|--------------------|---------------------------|-----|
| W-6 | Metrication U.S.A. | Dr. Sol A. Ward, CCE..... | W-6 |
|-----|--------------------|---------------------------|-----|

